

A new species of *Lychas* Koch, 1845 (Chelicerata, Scorpiones, Buthidae) from Sri Lanka

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A new species of *Lychas* Koch, 1845 (Chelicerata, Scorpiones, Buthidae) from Sri Lanka. - A new species of scorpion, *Lychas srilankensis* sp. n., is described based on two specimens; one male specimen collected in Man District, Occapu Kallu, Wilpattu and one protonymph collected in Hambantota District, Palatupana near the entrance of the Yala National Park. This is the second record of a *Lychas* species in Sri Lanka. The first record is the citation by VACHON (1982) of a immature specimen described merely as a species of *Lychas*.

Key-words: Scorpion - *Lychas* - Sri Lanka

INTRODUCTION

The genus *Lychas* with approximately 30 described species (KOVARIK 1995) has a wide range of distribution extending from Australia and the Indo-Malayan region, to southern China, the Himalayan region and parts of Africa. Although it is well represented in India no species has yet been described from Sri Lanka. In a very comprehensive paper on the scorpions of Sri Lanka, VACHON (1982), recorded a single first instar specimen collected at Palatupana at the entrance of the Yala National Park which, according to him, showed affinities to *Lychas shoplanti* (Oates, 1888) and *Lychas feae* (Thorell, 1889), both from Burma. VACHON (1982) recorded several morphological characters of this specimen. He did not reach a final conclusion, but insisted that, as far as he knew, this was the first *Lychas* ever collected in Sri Lanka.

While examining a small collection of scorpions from Sri Lanka I found another specimen of *Lychas*, this time a sub-adult male which, after precise examination was found to correspond quite well with the specimen previously studied by VACHON (1982) and restudied by me, but could not be attributed to any known species.

***Lychas srilankensis* n. sp.**

Figs 1-9

Holotype male (pre-adult): Sri Lanka, Northern Province: Mannar District, Occapu Kallu, Wilpattu, 50 m. in abandoned termite nest, 18-III-1970. leg. Davis & Rowe.

Paratype (protonymphe): Sri Lanka, Southern Province: Hambantota District, Palatupana near the entrance of the Yala National Park, sifting in humide zone of savannah, 24.-I-1970, leg. C. Besuchet & I. Löbl (VACHON 1982: 84-86).

Deposited in the Muséum d'histoire naturelle, Genève.

Etymology: the specific name refers to the country.

Diagnosis: As already suggested by VACHON (1982), the new species shows affinities with *Lychas shoplandi* (Oates, 1888) and *Lychas feae* (Thorell, 1889), both described from Burma. When describing *L. feae* Thorell (1889) also suggested that it had affinities with *L. shoplandi*, whereas KRAEPELIN (1899) considered *L. feae* to be an intermediate form between *L. shoplandi* and *Lychas scaber* Pocock, 1892. Moreover, he did not include *L. feae* in his key for the determination of the species.

The new species *Lychas srilankensis* can be distinguished from *L. shoplandi* by the presence of lighter pigmentation generally and from *L. feae* by the number of pectinal teeth. Moreover, the insular geographical distribution of the new species confirms its position as representing an isolated population, since scorpion populations in general present very predictable geographical ranges of distribution (LOURENÇO 1996a, b).

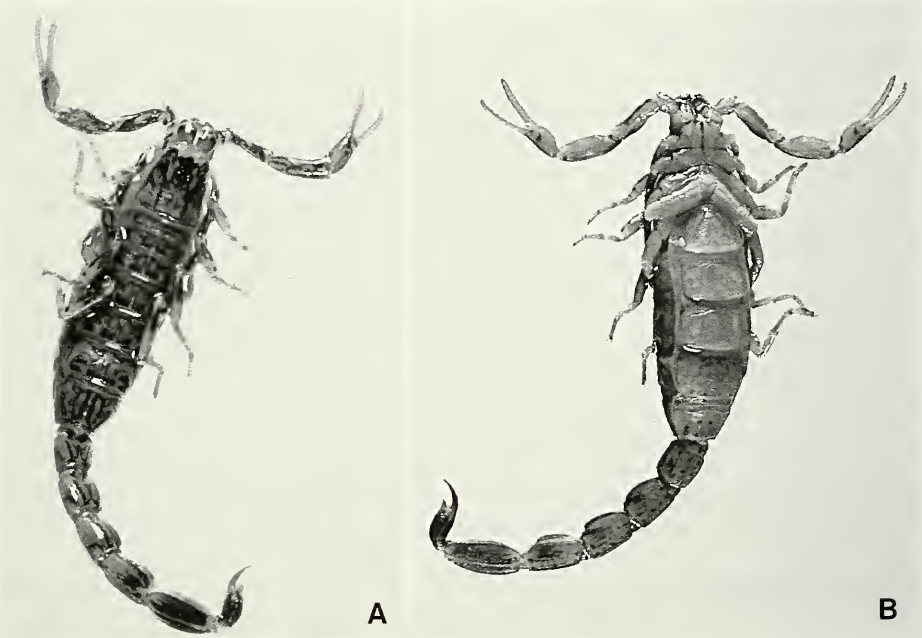
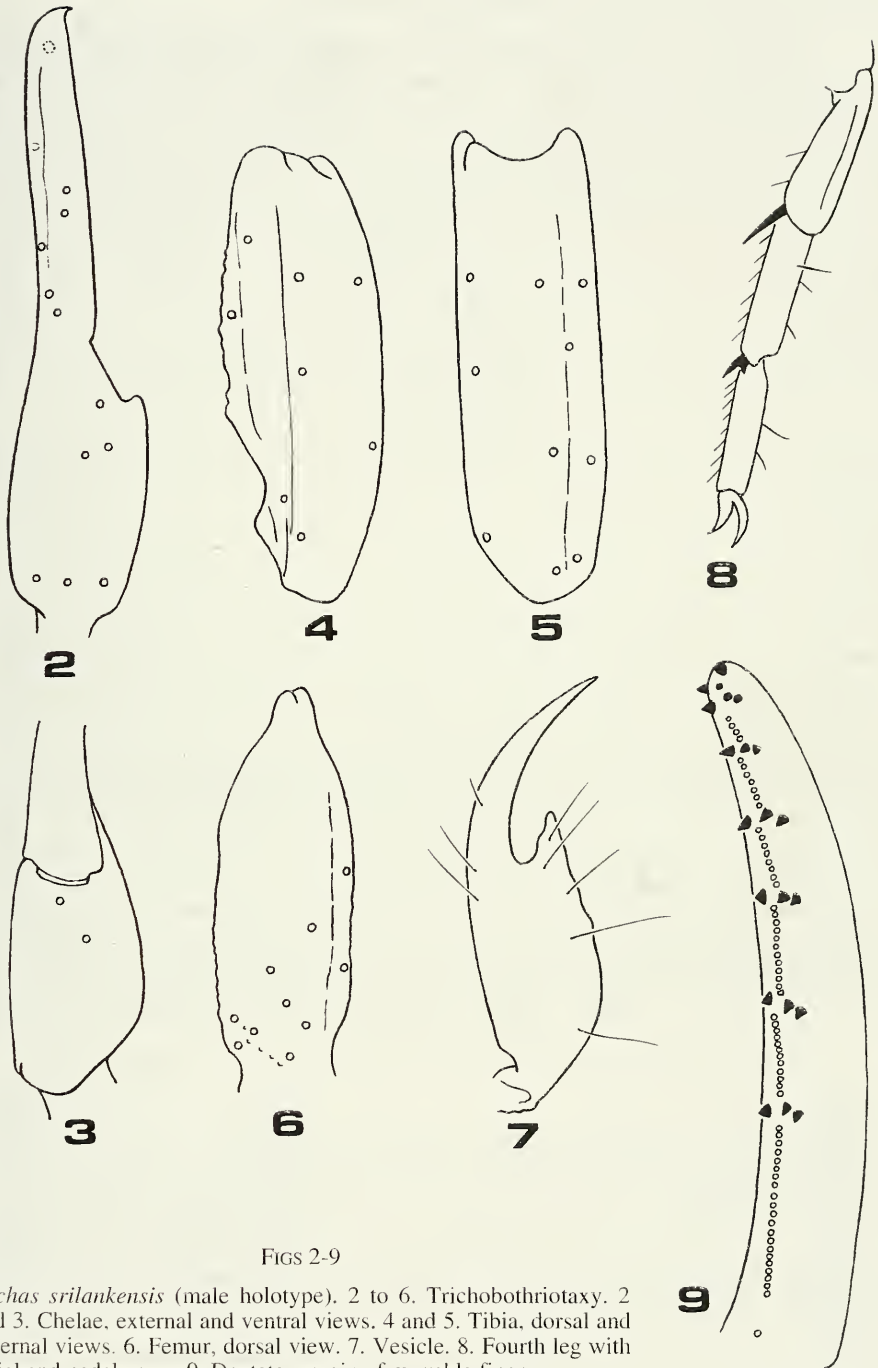


FIG. 1

Lychas srilankensis (male holotype). A. Dorsal view. B. Ventral view.



FIGS 2-9

Lychas srilankensis (male holotype). 2 to 6. Trichobothriotaxy. 2 and 3. Chelae, external and ventral views. 4 and 5. Tibia, dorsal and external views. 6. Femur, dorsal view. 7. Vesicle. 8. Fourth leg with tibial and pedal spurs. 9. Dentate margin of movable finger.

Description based on holotype (measurements in Table I).

Coloration. Basically yellowish, symmetrically marbled with dark reddish brown producing an overall spotted appearance. Prosoma: carapace yellowish and heavily spotted, excepted on the anterior margin; eyes surrounded with black pigment. Mesosoma: yellowish with variegated brown spots over all tergites; more densely marked on the last five. Metasoma: segments I to IV yellowish, with small round brown spots ventrally; diffuse spots laterally; triangular spots dorsally. Segment V very dark brown to black; extremities yellowish. Vesicle dark brown with the base of the aculeous yellowish and the extremity reddish. Venter light yellow with a few darker spots on posterior end of sternite V. Chelicerae yellowish with variegated brown spots; base of fingers black; fingers yellowish-red. Pedipalps: yellowish with several spots on the femur and tibia; chelae less densely spotted; fingers yellowish. Legs yellowish with dark brown longitudinal spots on the first four segments.

Morphology. Carapace feebly granular; anterior margin with a very feeble median concavity. Anterior median superciliary and posterior median keels feeble. All furrows very feeble. Carapace very flat overall. Median ocular tubercle distinctly anterior to the centre; median eyes separated by more than one ocular diameter. Three pairs of lateral eyes. Sternum subtriangular. Mesosoma: tergites feebly granular. Median keel present in all tergites; tergites III to VI tricarinate. Tergite VII pentacarinat. Venter: genital operculum divided longitudinally. Pectines: pectinal tooth count 23-22; basal middle lamellae of the pectines not dilated. Sternites smooth with elongated stigmata; VII without keels. Metasoma: segments I to III with 10 keels, crenulate; lateral inframedian keels on segment III vestigial; absent from IV which has 8 keels. Segment V with 5 keels. Intercarinal spaces moderately granular. Telson with 5 vestigial keels ventrally and with a long and moderately curved aculeous; subaculeous tooth very strong and spinoid. Cheliceral dentition characteristic of the family Buthidae (VACHON 1963). Pedipalps: femur pentacarinat; tibia and chelae with some keels but moderately crenulate; internal face of tibia smooth; all faces moderate to feebly granular. Movable fingers with 6/7 oblique rows of granules; small internal and external accessory granules present. Trichobothriotaxy; orthobothriotaxy A- β (VACHON 1973, 1975). Legs: tarsus with very numerous median fine setae ventrally. Legs III and IV with one strong tibial spur and moderate pedal spurs.

TABLE I. Morphometric values (in mm) of the male holotype of *Lychas srilankensis*

Carapace:		Vesicle:	
- length	2.8	- width	0.9
- anterior width	1.9	- depth	0.8
- posterior width	2.7	Pedipalp:	
Metasomal segment I:		- Femur length	2.1
- length	1.8	- Femur width	0.6
- width	1.5	- Tibia length	2.6
Metasomal segment V:		- Tibia width	0.8
- length	3.0	- Chelae length	3.7
- width	1.5	- Chelae width	0.8
- depth	1.4	- Chelae depth	0.8
		Movable finger:	
		- length	2.3



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FIG. 10

Map of Sri Lanka indicating the type locality of *Lychas srilankensis* and the locality indicated by VACHON (1982) of the earlier specimen of *Lychas*.

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